DOCUMENT RESUME

ED 388 737 UD 030 662

AUTHOR Slavin, Robert E.; And Others
TITLE Success for All: A Summary of Research.
INSTITUTION Center for Research on the Education of Students Placed At Risk, Baltimore, MD.
SPONS AGENCY Abell Foundation, Baltimore, MD.; Carnegie Corp. of New York, N.Y.; Office of Educational Research and Improvement (ED), Washington, DC.; Pew Charitable Trusts, Philadelphia, PA.
PUB DATE Apr 95
CONTRACT R117D40005; R117R90002
NOTE 57p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, April 18-22, 1995).
PUB TYPE Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Academic Achievement; Compensatory Education; *Early Intervention; Economically Disadvantaged; Educational Change; *Educational Research; Elementary Education; Poverty; Prevention; Program Evaluation; *Reading Achievement; Research Reports; *School Restructuring; *Urban Schools
IDENTIFIERS *Program Replication; Reading Recovery Projects; *Success for All Program

ABSTRACT

This paper describes the current state of research on Success for All, a program built around the idea that every child can and must succeed in the early grades. Success for All assumes that every child without organic retardation can read. Requirements for success include prevention and intensive early intervention. Success for All began in one Baltimore (Maryland) school in 1987-88 and has spread to about 300 schools nationwide in fall 1995. Almost all Success for All schools are high-poverty Title I schools, and the majority of programs are schoolwide programs under Title I. To summarize the outcomes of the program in all schools and all years involved in experimental control comparisons, this paper uses multi-site replicated experiment analysis in which each grade level cohort is considered a replication. Evaluation results for 19 Success for All schools in 9 districts in 8 states clearly show that the program increases reading performance. Of particular interest are results that compare Success for All with Reading Recovery for different purposes. Results demonstrate that comprehensive, systemic school-by-school change can take place on a broad scale while maintaining the integrity and effectiveness of the model. (Contains 6 tables, 6 figures, and 39 references.) (SLD)

Success for All: A Summary of Research

Robert E. Slavin
Nancy A. Madden
Lawrence J. Dolan
Barbara A. Wasik

Center for Research on the Education of Students Placed at Risk

Johns Hopkins University

Steven Ross
Lana Smith

University of Memphis

Marcella Dianda

Southwest Regional Laboratory

Paper presented at the annual conference of the American Educational Research Association, San Francisco, April, 1995.

This research was supported by grants from the Office of Educational Research and Improvement, U.S. Department of Education (Nos. OERI-R-117-R90002 and R-117-D40005), from the Carnegie Corporation, the Pew Charitable Trusts, and the Abell Foundation. However, any opinions expressed do not necessarily represent the positions or policies of our funders.

We would like to thank the following individuals for their help in research on Success for All: Matthew Riley, Lawrence Howe, and Fred Cottman of the Baltimore City Public Schools; Katherine Conner, Allie Mulvihill, and Inez Hill of the Philadelphia Public Schools; Claire Eadon, Cheryl Boan, and Patsy Griffing of the Charleston County (SC) Public Schools; Charles Welch, Cornelia Shideler, and Sharon Mukes of the Ft. Wayne (IN) Community Schools; Janis Hull of the Vallivue (ID) School District; Carolyn Burks of the Montgomery County (AL) Public Schools; Nancy Karweit, Gretta Gordy, Renee Kling, Alta Shaw, Robert Petza, Mary Alice Bond, and Barbara Haxby of the Johns Hopkins University; and Jason Casey, Brenda Johnson, Carole Bond, Anne Faulks, Ann Crawford, and Michele Shapiro of the University of Memphis.

Ms. Martin's kindergarten class has some of the brightest, happiest, friendliest, and most optimistic kids you'll ever meet. Students in her class are glad to be in school, proud of their accomplishments, certain that they will succeed at whatever the school has to offer. Every one of them is a natural scientist, a storyteller, a creative thinker, a curious seeker of knowledge. Ms. Martin's class could be anywhere, in suburb or ghetto, small town or barrio, it doesn't matter. Kindergartners everywhere are just as bright, enthusiastic, and confident as her kids are.

Only a few years from now, many of these same children will have lost the spark they all started with. Some will have failed a grade. Some will be in special education. Some will be in long term remediation, such as Title I or other remedial programs. Some will be bored or anxious or unmotivated. Many will see school as a chore rather than a pleasure and will no longer expect to excel. In a very brief span of time, Ms. Martin's children will have defined themselves as successes or failures in school. All too often, only a few will still have a sense of excitement and positive self-expectations about learning. We cannot predict very well which of Ms. Martin's students will succeed and which will fail, but we can predict based on the past that if nothing changes, far too many will fail. This is especially true if Ms. Martin's kindergarten happens to be located in a high-poverty neighborhood, in which there are typically fewer resources in the school to provide top-quality instruction to every child, fewer forms of rescue if children run into academic difficulties, and fewer supports for learning at home. Preventable failures occur in all schools, but in high poverty schools failure can be endemic, so widespread that it makes it difficult to treat each child at risk of failure as a person of value in need of emergency assistance to get back on track. Instead, many such schools do their best to provide the greatest benefit to the greatest number of children possible, but have an unfortunately well-founded expectation that a certain percentage of students will fall by the wayside during the elementary years.

Any discussion of school reform should begin with Ms. Martin's kindergartners. The first goal of reform should be to ensure that every child, regardless of home background, home language, or learning style, achieves the success that he or she so confidently expected in

kindergarten, that all children maintain their motivation, enthusiasm, and optimism because they are objectively succeeding at the school's tasks. Any reform that does less than this is hollow and self-defeating.

What does it mean to succeed in the early grades? The elementary school's definition of success, and therefore the parents' and children's definition as well, is overwhelmingly success in reading. Very few children who are reading adequately are retained, assigned to special education, or given long-term remedial services. Other subjects are important, of course, but reading and language arts form the core of what school success means in the early grades.

When a child fails to read well in the early grades, he or she begins a downward progression. In first grade, some children begin to notice that they are not reading adequately. They may fail first grade or be assigned to long term remediation. As they proceed through the elementary grades, many students begin to see that they are failing at their full-time jobs. When this happens, things begin to unravel. Failing students begin to have poor motivation and poor self-expectations, which lead to continued poor achievement, in a declining spiral that ultimately leads to despair, delinquency, and dropout.

Remediating learning deficits after they are already well established is extremely difficult. Children who have already failed to learn to read, for example, are now anxious about reading, and doubt their ability to learn it. Their motivation to read may be low. They may ultimately learn to read but it will always be a chore, not a pleasure. Clearly, the time to provide additional help to children who are at risk is early, when children are still motivated and confident and when any learning deficits are relatively small and remediable. The most important goal in educational programming for students at risk of school failure is to try to make certain that we do not squander the greatest resource we have: the enthusiasm and positive self-expectations of young children themselves.

In practical terms, what this perspective implies is that schools, and especially Title I, special education, and other services for at-risk children, must be shifted from an emphasis on remediation to an emphasis on prevention and early intervention. Prevention means providing

developmentally appropriate preschool and kindergarten programs so that students will enter first grade ready to succeed, and it means providing regular classroom teachers with effective instructional programs, curricula, and professional development to enable them to see that most students are successful the first time they are taught. Early intervention means that supplementary instructional services are provided early in students' schooling and that they are intensive enough to bring at-risk students quickly to a level at which they can profit from good quality classroom instruction.

The purpose of this paper is to describe the current state of research on Success for All, a program built around the idea that every child can and must succeed in the early grades, no matter what this takes. The idea behind Success for All is to use everything we know about effective instruction for students at risk to direct all aspects of school and classroom organization toward the goal of preventing academic deficits from appearing in the first place; recognizing and intensively intervening with any deficits that do appear; and providing students with a rich and full curriculum to enable them to build on their firm foundation in basic skills. The commitment of Success for All is to do whatever it takes to see that every child becomes a skilled, strategic, and enthusiastic reader as they progress through the elementary grades.

Program Description

Success for All is built around the assumption that every child can read. We mean this not as wishful thinking or as philosophical statement, but as a practical, attainable reality. In particular, every child without organic retardation can learn to read. Some children need more help than others and may need different approaches than those needed by others, but one way or another every child can become a successful reader.

The first requirement for the success of every child is prevention. This means providing excellent preschool and kindergarten programs, improving curriculum, instruction, and classroom

management throughout the grades, assessing students frequently to make sure they are making adequate progress, and establishing cooperative relationships with parents so they can support students learning at home.

Top-quality curriculum and instruction from age four on will ensure the success of most students, but not all of them. The next requirement for the success of all students is intensive early intervention. This means one-to-one tutoring by certified teachers for first graders having reading problems. It means being able to work with parents and social service agencies to be sure that all students attend school, have medical services or eyeglasses if they need them, have help with behavior problems, and so on.

The most important idea in Success for All is that the school must relentlessly stick with every child until that child is succeeding. If prevention is not enough the child may need tutoring. If this is not enough he or she may need help with behavior or attendance or eyeglasses. If this is not enough he may need a modified approach to reading. The school does not merely provide services to children, it constantly assesses the results of the services it provides and keeps varying or adding services until every child is successful.

Success for All began in one Baltimore elementary school in 1987-1988, and since then has expanded each year to additional schools. As of fall, 1995, it is in about 300 schools in 70 districts in 23 states throughout the U.S. The districts range from some of the largest in the country, such as Baltimore, Houston, Memphis, Philadelphia, Cincinnati, Cleveland, Chicago, New York, and Miami, to such middle-sized districts as Montgomery, Alabama; Rockford, Illinois; and Modesto and Riverside, California, to tiny rural districts, including two on the Navajo reservation in Arizona. Success for All reading curricula in Spanish have been developed and researched and are used in bilingual programs in California, Texas, Arizona, Florida, Illinois, New York, New Jersey, and Philadelphia. Almost all Success for All schools are high-poverty Title I schools, and the great majority are schoolwide projects. Otherwise, the schools vary widely.

Overview of Success for All Components

Success for All has somewhat different components at different sites, depending on the school's needs and resources available to implement the program (adapted from Slavin et al., 1992). However, there is a common set of elements characteristic of all.

Reading Program

Success for All uses a reading curriculum based on research and effective practices in beginning reading (e.g., Adams, 1990), and on effective use of cooperative learning (Slavin, 1995; Stevens, Madden, Slavin, and Farnish, 1987).

Reading teachers at every grade level begin the reading time by reading children's literature to students and engaging them in a discussion of the story to enhance their understanding of the story, listening and speaking vocabulary, and knowledge of story structure. In kindergarten and first grade, the program emphasizes the development of oral language and pre-reading skills through the use of thematically-based units which incorporate areas such as language, art, and writing under a science or social studies topic. A component called Story Telling and Retelling (STaR) involves the students in listening to, retelling, and dramatizing children's literature. Big books as well as oral and written composing activities allow students to develop concepts of print as they also develop knowledge of story structure. There is also a strong emphasis on phonetic awareness activities which help develop auditory discrimination and supports the development of reading readiness strategies.

Reading Roots is typically introduced in the second semester of kindergarten or in first grade. This K-1 beginning reading program uses as its base a series of phonetically regular but meaningful and interesting minibooks and emphasizes repeated oral reading to partners as well as to the teacher. The minibooks begin with a set of "shared stories," in which part of a story is written in small type (read by the teacher) and part is written in large type (read by the students).

The student portion uses a phonetically controlled vocabulary. Taken together, the teacher and student portions create interesting, worthwhile stories. Over time, the teacher portion diminishes and the student portion lengthens, until students are reading the entire book. This scaffolding allows students to read interesting literature when they only have a few letter sounds.

Letters and letter sounds are introduced in an active, engaging set of activities that begins with oral language and moves into written symbols. Individual sounds are integrated into a context of words, sentences and stories. Instruction is provided in story structure, specific comprehension skills, metacognitive strategies for self-assessment and self-correction, and integration of reading and writing.

Spanish bilingual programs use an adaptation of *Reading Roots* called *Lee Conmigo* ("Read With Me"). *Lee Conmigo* uses the same instructional strategies as *Reading Roots*, but is built around the Macmillan *Campanitas de Oro* series.

When students reach the primer reading level, they use a program called *Beyond the Basics,* an adaptation of Cooperative Integrated Reading and Composition (CIRC) (Stevens, Madden, Slavin, & Farnish, 1987). *Beyond the Basics* uses cooperative learning activities built around story structure, prediction, summarization, vocabulary building, decoding practice, and story-related writing. Students engage in partner reading and structured discussion of stories or novels, and work toward mastery of the vocabulary and content of the story in teams. Story-related writing is also shared within teams. Cooperative learning both increases students' motivation and engages students in cognitive activities known to contribute to reading comprehension, such as elaboration, summarization, and rephrasing (see Slavin, 1995). Research on CIRC has found it to significantly increase students' reading comprehension and language skills (Stevens et al., 1987).

In addition to these story-related activities, teachers provide direct instruction in reading comprehension skills, and students practice these skills in their teams. Classroom libraries of trade books at students' reading levels are provided for each teacher, and students read books of their

choice for homework for 20 minutes each night. Home readings are shared via presentations, summaries, puppet shows, and other formats twice a week during "book club" sessions.

Materials to support *Beyond the Basics* through the sixth grade (or beyond) exist in English and Spanish. The English materials are build around children's literature and around the most widely used basal series and anthologies. Supportive materials have been developed for more than 100 children's novels and for most current basal series. Spanish materials are similarly built around Spanish-language novels and the *Campanitas* basal program.

Beginning in the second semester of program implementation, Success for All schools usually implement a writing/ language arts program based primarily on cooperative learning principles (see Slavin, Madden, & Stevens, 1989/90).

Students in grades one to three (and sometimes 4 to 5 or 4 to 6) are regrouped for reading. The students are assigned to heterogeneous, age-grouped classes most of the day, but during a regular 90-minute reading period they are regrouped by reading performance levels into reading classes of students all at the same level. For example, a 2-1 reading class might contain first, second, and third grade students all reading at the same level. The reading classes are smaller than homerooms because tutors and other certified staff (such as librarians or art teachers) teach reading during this common reading period. Regrouping allows teachers to teach the whole reading class without having to break the class into reading groups. This greatly reduces the time spent in seatwork and increases direct instruction time, eliminating workbooks, dittos, or other follow-up activities which are needed in classes that have multiple reading groups. The regrouping is a form of the Joplin Plan, which has been found to increase reading achievement in the elementary grades (Slavin, 1987).

Eight-Week Reading Assessments

At eight week intervals, reading teachers assess student progress through the reading program. The results of the assessments are used to determine who is to receive tutoring, to change students' reading groups, to suggest other adaptations in students' programs, and to identify students who need other types of assistance, such as family interventions or screening for vision and hearing problems. The assessments are curriculum-based measures that include teacher observations and judgments as well as more formal measures of reading comprehension.

Reading Tutors

One of the most important elements of the Success for All model is the use of tutors to promote students' success in reading. One-to-one tutoring is the most effective form of instruction known (see Wasik & Slavin, 1993). The tutors are certified teachers with experience teaching Title 1, special education, and/or primary reading. Often, well-qualified paraprofessionals also tutor children with less severe reading problems. In this case, a certified tutor monitors their work and assists with the diagnostic assessment and intervention strategies. Tutors work one-on-one with students who are having difficulties keeping up with their reading groups. The tutoring occurs in 20-minute sessions during times other than reading or math periods.

In general, tutors support students' success in the regular reading curriculum, rather than teaching different objectives. For example, the tutor will work with a student on the same story and concepts being read and taught in the regular reading class. However, tutors seek to identify learning problems and use different strategies to teach the same skills. They also teach metacognitive skills beyond those taught in the classroom program (Wasik & Madden, 1995). Schools may have as many as six or more teachers serving as tutors depending on school size, need for tutoring, and other factors.

During daily 90-minute reading periods, certified tutors serve as additional reading teachers to reduce class size for reading. Reading teachers and tutors use brief forms to communicate about students' specific problems and needs and meet at regular times to coordinate their approaches with individual children.

Initial decisions about reading group placement and the need for tutoring are based on informal reading inventories that the tutors give to each child. Subsequent reading group placements and tutoring assignments are made using the curriculum-based assessments described above. First graders receive priority for tutoring, on the assumption that the primary function of the tutors is to help all students be successful in reading the first time, before they fail and become remedial readers.

Preschool and Kindergarten

Most Success for All schools provide a half-day preschool and/or a full-day kindergarten for eligible students. The preschool and kindergarten programs focus on providing a balanced and developmentally appropriate learning experience for young children. The curriculum emphasizes the development and use of language. It provides a balance of academic readiness and non-academic music, art, and movement activities in a series of thematic units. Readiness activities include use of the Peabody Language Development Kits and Story Telling and Retelling (STaR) in which students retell stories read by the teachers. Pre-reading activities begin during the second semester of kindergarten.

Family Support Team

Parents are an essential part of the formula for success in Success for All. A Family Support Team works in each school, serving to make families feel comfortable in the school and become active supporters of their child's education as well as providing specific services. The

Family Support Team consists of the Title I parent liaison, vice-principal (if any), counselor (if any), facilitator, and any other appropriate staff already present in the school or added to the school staff.

The Family Support Team first works toward good relations with parents and to increase involvement in the schools. Family Support Team members may complete "welcome" visits for new families. They organize many attractive programs in the school, such as parenting skills workshops. Many schools use a program called "Raising Readers" in which parents are given strategies to use in reading with their own children.

The Family Support Team also intervenes to solve problems. For example, they may contact parents whose children are frequently absent to see what resources can be provided to assist the family in getting their child to school. Family support staff, teachers, and parents work together to solve school behavior problems. Also, family support staff are called on to provide assistance when students seem to be working at less than their full potential because of problems at home. Families of students who are not receiving adequate sleep or nutrition, need glasses, are not a ending school regularly, or are exhibiting serious behavior problems, may receive family support assistance.

The Family Support Team is strongly integrated into the academic program of the school. It receives referrals from teachers and tutors regarding children who are not making adequate academic progress, and thereby constitutes an additional stage of intervention for students in need above and beyond that provided by the classroom teacher or tutor. The Family Support Team also encourages and trains the parents to fulfill numerous volunteer roles within the school, ranging from providing a listening ear to emerging readers to helping in the school cafeteria.

Program Facilitator

A program facilitator works at each school to oversee (with the principal) the operation of the Success for All model. The facilitator helps plan the Success for All program, helps the principal

with scheduling, and visits classes and tutoring sessions frequently to help teachers and tutors with individual problems. He or she works directly with the teachers on implementation of the curriculum, classroom management, and other issues, helps teachers and tutors deal with any behavior problems or other special problems, and coordinates the activities of the Family Support Team with those of the instructional staff.

Teachers and Teacher Training

The teachers and tutors are regular certified teachers. They receive detailed teacher's manuals supplemented by three days of inservice at the beginning of the school year. For classroom teachers of grades 1-3 and for reading tutors, these training sessions focus on implementation of the reading program, and their detailed teachers' manuals cover general teaching strategies as well as specific lessons. Preschool and kindergarten teachers and aides are trained in use of the STaR and Peabody programs, thematic units, and other aspects of the preschool and kindergarten models. Tutors later receive two additional days of training on tutoring strategies and reading assessment.

Throughout the year, additional inservice presentations are made by the facilitators and other project staff on such topics as classroom management, instructional pace, and cooperative learning. Facilitators also organize many informal sessions to allow teachers to share problems and problem solutions, suggest changes, and discuss individual children. The staff development model used in Success for All emphasizes relatively brief initial training with extensive classroom follow-up, coaching, and group discussion.

Advisory Committee

An advisory committee composed of the building principal, program facilitator, teacher representatives, parent representatives, and family support staff meets regularly to review the

progress of the program and to identify and solve any problems that arise. In most schools existing site-based management teams are adapted to fulfill this function. In addition, grade level teams and the Family Support Team meet regularly to discuss common problems and solutions and to make decisions in their areas of responsibility.

Special Education

Every effort is made to deal with students' learning problems within the context of the regular classroom, as supplemented by tutors. Tutors evaluate students' strengths and weaknesses and develop strategies to teach in the most effective way. In some schools, special education teachers work as tutors and reading teachers with students identified as learning disabled as well as other students experiencing learning problems who are at risk for special education placement. One major goal of Success for All is to keep students with learning problems out of special education if at all possible, and to serve any students who do qualify for special education in a way that does not disrupt their regular classroom experience (see Slavin, Madden, Karweit, Dolan, Wasik, Shaw, Mainzer, & Haxby, 1991).

Relentlessness

While the particular elements of Success for All may vary from school to school, there is one feature we try to make consistent in all: a relentless focus on the success of every child. It would be entirely possible to have tutoring and curriculum change and family support and other services yet still not ensure the success of at-risk children. Success does not come from piling on additional services but from coordinating human resources around a well-defined goal, constantly assessing progress toward that goal, and never giving up until success is achieved.

None of the elements of Success for All are completely new or unique to this program. What is most distinctive about the program is its schoolwide, coordinated, and proactive plan for

translating positive expectations into concrete success for all children. Every child can complete elementary school reading confidently, strategically, and joyfully and can maintain the enthusiasm and positive self-expectations with which they came to first grade. The purpose of Success for All is to see that this vision can become a practical reality in every school.

Research on Success for All

From the very beginning, there has been a strong focus in Success for All on research and evaluation. We began longitudinal evaluations of the program in its earliest sites, six schools in Baltimore and Philadelphia and one in Charleston, SC. Later, third-party evaluators at the University of Memphis, Steve Ross, Lana Smith, and their colleagues, added evaluations in Memphis, Montgomery (AL), Ft. Wayne (IN), and Caldwell (ID). Most recently, studies focusing on English language learners in California have been conducted in Modesto and Riverside by Marcie Dianda of the Southwest Regional Laboratory. Each of these evaluations has compared Success for All schools to matched comparison schools on measures of reading performance, starting with cohorts in kindergarten or in first grade and continuing to follow these students as long as possible (details of the evaluation design appear below). Vagaries of funding and other local problems have ended some evaluations prematurely, but most have been able to follow Success for All schools for many years. As of this writing, there are seven years of continuous data from the six original schools in Baltimore and Philadelphia, and varying numbers of years of data from seven other districts, a total of nineteen schools (and their matched control schools). Table 1 lists the districts and characteristics of the schools.

==========

TABLE 1 HERE

==========

Earlier evaluations of Success for All schools have found almost uniformly positive outcomes for all schools on all reading measures (see Slavin et al., 1990; Slavin et al., 1993; Madden et al., 1994). Smaller special-purpose studies have also found positive effects of Success for All on such outcomes as attendance and reduced special education placement and referrals (Slavin et al., 1992, 1994).

In order to summarize the outcomes from all schools and all years involved in experimental control comparisons, this paper uses a method of analysis, called a multi-site replicated experiment (Slavin, 1993), in which each grade level *cohort* (students in all classes in that grade in a given year) in each school is considered a replication. In other words, if three first grades have proceeded through school X, each first grade cohort (compared to its control group) produces an effect size representing the experimental-control difference in student achievement that year. For example, across 19 schools ever involved in Success for All evaluations, there are a total of 55 first grade cohorts from which experimental and control achievement data have been collected. This procedure is a direct application of a procedure common in medical research called multicenter clinical trial (Horwitz, 1987). In such studies small-scale experiments located in different sites over extended time periods are combined into one large-scale experiment. For example, patients entering any of several hospitals with a given disease might be given an experimental drug or a placebo at random. If the disease is relatively rare, no one hospital's experiment would have an adequate sample size to assess the drug's effects, but combining results over many hospitals over time does provide an adequate sample. In schoolwide reform, the "patient" is an entire grade level in a school, perhaps 100 children. Obtaining an adequate sample of schools at any point in time would require involving thousands of children and hundreds of teachers.

The idea of combining results across experiments is not, of course, foreign to educational research. This is the essence of meta-analysis (Glass, McGaw, & Smith, 1981). However, meta-analyses combine effect sizes (proportions of a standard deviation separating experimental and control groups) across studies with different designs, measures, samples, and other features, leading to such charges as that they may mislead readers by "combining apples and oranges" or by

missing unwritten or unpublished studies in which effects were zero or negative (Matt & Cook, 1994; Slavin, 1986).

Combining results across geographically separated experiments into one study is also not unheard-of in educational research. For example, Pinnell, Lyons, DeFord, Bryk, and Seltzer (1994) studied the Reading Recovery tutoring model in ten Ohio districts. Three variations of Reading Recovery were compared to control groups in each district, and results were then aggregated using the cohort of tutored first graders as the unit of analysis. A multi-site replicated experiment only adds to this design the accumulation of experimental-control differences over time.

In addition to applying the multi-site replicated experiment design to data from Success for All schools, this paper also summarizes results of several studies in particular subsets of schools. These include studies of outcomes of the Spanish version of Success for All, *Lee Conmigo;* studies of Success for All with students in English as a Second Language (ESL) programs; studies of special education outcomes of the model; and studies comparing Success for All and Reading Recovery. This paper summarizes the state of research on Success for All in all study sites as of the seventh year of program implementation.

Evaluation Design

A common evaluation design, with variations due to local circumstances, has been used in all Success for All evaluations. Every Success for All school involved in a formal evaluation is matched with a control school that is similar in poverty level (percent of students qualifying for free lunch), historical achievement level, ethnicity, and other factors. Children in the Success for All schools are then matched on district-administered standardized test scores given in kindergarten or (starting in 1991 in four districts) on Peabody Picture Vocabulary Test (PPVT) scores given by the project in the fall of kindergarten or first grade. In some cases, analyses of covariance rather than individual child matches were used, and at Key School in Philadelphia schools were matched but

individual children could not be (because the school serves many limited English proficient students who were not tested by the district in kindergarten).

The measures used in the evaluations were as follows:

1. Woodcock Reading Mastery Test. Three Woodcock scales, Word Identification, Word Attack, and Passage Comprehension, were individually administered to students by trained testers. Word Identification assesses recognition of common sight words, Word Attack assesses phonetic synthesis skills, and Passage Comprehension assesses comprehension in context. Students in Spanish bilingual programs were given the Spanish versions of these scales.
2. Durrell Analysis of Reading Difficulty. The Durrell Oral Reading scale was also individually administered to students in grades 1-3. It presents a series of graded reading passages which students read aloud, followed by comprehension questions.
3. Gray Oral Reading Test. Comprehension and passage scores from the Gray Oral Reading Test were obtained from students in grades 4-5.

Except at Key, analyses of covariance with pretests as covariates were used to compare raw scores in all evaluations, and separate analyses were conducted for students in general and for students in the lowest 25% of their grades. At Key, analyses of variance were used and results were reported separately for Asian (mostly Cambodian) students and for non-Asian students.

The tables and figures presented in this paper summarize student performance in grade equivalents (adjusted for covariates) and effect size (proportion of a standard deviation separating the experimental and control groups), averaging across individual measures. Neither grade equivalents nor averaged scores were used in the analyses, but they are presented here as a useful summary. Outcomes are presented for all students in the relevant grades in Success for All and control schools, and also those for the students in the lowest 25% of their grades, who are most at risk. In most cases the low 25% was determined based on Peabody Picture Vocabulary Test scores given as pretests. In Baltimore and Charleston, South Carolina, however, Peabody pretests

were not given and low 25% analyses involve the lowest-performing students at posttest. At Philadelphia's Key School, outcomes are shown separately for Asian and non-Asian students.

Each of the evaluations summarized in this paper follows children who began in Success for All in first grade or earlier, in comparison to children who had attended the control school over the same period. Because Success for All is a prevention and early intervention program, students who start in it after first grade are not considered to have received the full treatment (although they are of course served within the schools). For more details on methods and findings, see Slavin et al. (1992) and the full site reports.

Reading Outcomes

The results of the multi-site replicated experiment evaluating Success for All are summarized in Figure 1 and Tables 2-6 for each grade level, 1-5. Each table shows means in raw scores, grade equivalents, and effect sizes. The analyses compare cohort means for experimental and control schools; for example, the t statistics presented in Table 2 compare 55 experimental to 55 control cohorts, with cohort (50-150 students) as the unit of analysis. The standard deviations show variation among school means, but effect sizes are means of all experimental/control comparisons, which are computed using individual student data. Grade equivalents are based on the means, and are only presented for their information value. No analyses were done using grade equivalents.

The results summarized in Tables 2-6 show statistically significantly (p=.05 or better) positive effects of Success for All (compared to controls) on every measure at every grade leve', 1-5. For students in general, effect sizes averaged around a half standard deviation at all grade levels. Effects were somewhat higher than this for the Woodcock Word Attack scale in first and second grades, but in grades 3-5 effect sizes were more or less equivalent on all aspects of reading. Consistently, effect sizes for students in the lowest 25% of their grades were particularly positive, ranging from ES=+1.03 in first grade to ES=+1.68 in fourth grade. Again, cohort-level analyses

found statistically significant differences favoring low achievers in Success for All on every measure at every grade level.

Changes in Effect Sizes Over Years of Implementation

One interesting trend in outcomes from comparisons of Success for All and control schools relates to changes in effects sizes according to the number of years a school has been implementing the program. Figure 2, which summarizes these data, was created by pooling effect sizes for all cohorts in their first year of implementation, all in their second year, and so on, regardless of calendar year.

==========

Figure 2 Here

==========

Figure 2 shows that mean reading effect sizes progressively increase with each year of implementation. For example, Success for All first graders score substantially better than control first graders at the end of the first year of implementation (ES=+0.49). The experimental-control difference is even higher for first graders attending schools in the second year of program implementation (ES=+0.53), increasing to an effect size of +0.73 for schools in their fourth implementation year. A similar pattern is apparent for second and third grade cohorts.

There are two likely explanations for this gain in experimental-control differences. One is that as schools get better at implementing Success for All, outcomes improve. This is a logical outcome, which gives evidence of the degree to which on-going professional development, coaching, and reflection enable school staffs to progressively improve student achievement over time. However, it is also important to note that while first -year first grade cohorts started the program in first grade, second-year cohorts started in kindergarten and most third- and fourth-year

cohorts started in prekindergarten. Some or all of the gain in effect sizes could be due to a lasting effect of participation in the Success for All prekindergarten and kindergarten program.

Whatever the explanation, the data summarized in Figure 2 show that while Success for All has an immediate impact on student reading achievement, this impact grows over successive years of implementation. Over time, schools may become increasingly able to provide effective instruction to all of their students, to approach the goal of success for *all.*

Success for All and English Language Learners

The education of English language learners is at a crossroads. For many years, researchers, educators, and policy makers have debated questions of the appropriate language instruction for students who enter elementary school speaking languages other than English. Research on this topic has generally found that students taught to read their home language and then transitioned to English ultimately become better readers in English than do students taught to read only in English (Garcia, 1991; Willig, 1985; Wong-Fillmore & Valdez, 1986). More recently, however, attention has shifted to another question. Given that students are taught to read their home language, how can we ensure that they *succeed* in that language? (See, for example, Garcia, 1994). There is no reason to expect that children failing to read well in Spanish, for example, will later become good readers and successful students in English. On the contrary, research consistently supports the common-sense expectation that the better students in Spanish bilingual programs read Spanish, the better their English reading will be (Garcia, 1991; Hakuta & Garcia, 1989). Clearly, the quality of instruction in home-language reading is a key factor in the ultimate school success of English language learners, and must be a focus of research on the education of these children.

Even if all educators and policy makers accepted the evidence favoring bilingual over English-only instruction, there would still be large numbers of English language learners being taught to read in English. This is true because of practical difficulties of providing instruction in

languages other than English or Spanish; teachers fully proficient in Southeast Asian languages, Arabic, and other languages are in short supply, as are materials to teach in these languages. Speakers of languages other than English or Spanish are among the fastest-growing groups in our nation's schools (GAO, 1994). Further, many Spanish-dominant students are taught to read in English, either because of shortages of bilingual teachers, insufficient numbers of Spanish-dominant students in one school, parental desires to have their children taught in English, or other factors. For these reasons, a large percentage of English language learners will always be taught in English only, with instruction in English as a second language (ESL). As with bilingual programs, the quality of reading instruction, ESL instruction, and the integration of the two are essential in determining the success of English language learners being taught in English only.

There is remarkably little research evaluating programs designed to increase the Spanish reading performance of students in bilingual programs. Hertz-Lazarowitz, Ivory, & Calderon (1993) evaluated a bilingual adaptation of Cooperative Integrated Reading and Composition (BCIRC) in El Paso elementary schools starting in second grade. This program, an adaptation of the CIRC program that forms the basis of the upper-elementary reading program used in Success for All, involves having students work in small cooperative groups. Students read to each other, work together to identify characters, settings, problems, and problem solutions in narratives, summarize stories to each other, and work together on writing, reading comprehension, and vocabulary activities. Students in BCIRC classes scored significantly better than control students on the Spanish Texas Assessment of Academic Skills (TAAS) at the end of second grade, and as they transitioned to English in third and fourth grades they performed significantly better than control students on standardized reading tests given in English.

The first application of Success for All to English language learners began in Philadelphia's Francis Scott Key School, which serves a high-poverty neighborhood in which more than 60% of students enter the schools speaking Cambodian or other Southeast Asian languages. An adaptation of Success for All was designed to meet the needs of these children. This adaptation focused on integrating the work of ESL teachers and reading teachers, so that ESL teachers taught a reading

class and then helped limited English proficient students with the specific language and reading skills needed to succeed in the school's (English) reading program. In addition, a cross-age tutoring program enabled fifth graders, now fully bilingual in English and Cambodian, to help kindergartners succeed in the English program. The performance of students at Francis Scott Key has been compared to that of students in a matched comparison school each year, and the results have consistently favored Success for All for Asian as well as non-Asian students (Slavin & Yampolsky, 1991). The present paper reports the reading performance of the English language learners in grades 3-5 at Key and its comparison school as of spring, 1994, the end of the sixth year of program implementation (see Slavin & Madden, 1995).

In 1992, a Spanish adaptation of the Success for All reading program called *Lee Conmigo* ("Read With Me") was developed for use in Spanish bilingual programs. During the 1992-1993 school year the entire Success for All program (including *Lee Conmigo* for LEP students) was implemented in one Philadelphia school serving a predominately Latino (mostly Puerto Rican) student body. The first year results showed the Spanish bilingual students to be performing substantially better than controls on individually administered tests of Spanish (Slavin & Madden, 1994). This paper reports the results for the second graders who completed their second year in *Lee Conmigo* (see Slavin & Madden, 1995).

A third evaluation of Success for All with English language learners was carried out by Dianda & Flaherty (1995) at the Southwest Regional Laboratory in Southern California. This study involved three schools. Fremont Elementary in Riverside, California, and Orville Wright Elementary in Modesto, are schools with substantial Spanish bilingual programs. The third, El Vista Elementary, also in Modesto, served a highly diverse student body speaking 17 languages using an ESL approach. Students in all three schools were compared to matched students in matched schools. In each case, students were assessed in the language of instruction (English or Spanish).

Francis Scott Key (ESL)

The program at Francis Scott Key was evaluated in comparison to a similar Philadelphia elementary school. The two schools were very similar in overall achievement level and other variables. Thirty-three percent of the comparison school's students were Asian (mostly Cambodian), the highest proportion in the city after Key. The percentage of students receiving free lunch was very high in both schools, though higher at Key (96%) than at the comparison school (84%).

The data reported here are for all students in grades 3-5 in Spring, 1994. With the exception of transfers, all students had been in the program since kindergarten.

==========

Figure 3 Here

==========

Results: Asian Students. The results for Asian students are summarized in Figure 3. Success for All Asian students at all three grade levels performed far better than control students. Differences between Success for All and control students were statistically significant on every measure at every grade level ($p<.001$). Median grade equivalents and effect sizes were computed across the three Woodcock scales. On average, Success for All Asian students exceeded control in reading grade equivalents by almost three years in third grade (Median ES = +1.76), more than 2 years in fourth grade (Median ES = +1.46), and about three years in fifth grade (Median ES = +1.44). Success for All Asian students were reading more than a full year above grade level in grade 3 and more than a half-year above in fourth and fifth grade, while similar control students were reading more than a year below grade level at all three grade levels.

Results: Non-Asian Students. Outcomes of Success for All for non-Asian students, also summarized in Figure 3, were also very positive in grades 3-5. Experimental-control differences were statistically significant ($p<.05$ or better) on every measure at every grade level. Effect sizes were somewhat smaller than for Asian students, but were still quite substantial, averaging +1.00 in grade 3, +0.96 in grade 4, and +0.78 in grade 5. Effect sizes were particularly large for the Passage Comprehension measure at all three levels. Success for All students averaged almost two years above grade level in third grade, more than a year above grade level in fourth grade, and about eight months above grade level in fifth grade; at all grade levels, Success for All averaged about 2.5 years higher than control students.

Fairhill (Bilingual)

The bilingual version of Success for All, *Lee Conmigo*, was first implemented at Fairhill Elementary School, a school in inner-city Philadelphia. Fairhill serves a student body of 694 students of whom 78% are Hispanic and 22% are African-American. A matched comparison school was also selected. Nearly all students in both schools qualified for free lunches. Both schools were Chapter 1 schoolwide projects, which means that both had high (and roughly equivalent) allocations of Chapter 1 funds that they could use flexibly to meet student needs.

Results. All students defined by district criteria as limited English proficient at Fairhill and its control school were pretested at the beginning of first grade on the Spanish Peabody Picture Vocabulary Test (PPVT). Each following May, these students were tested by native language speakers on three scales of the Spanish Woodcock (Bateria Woodcock de Proficiencia en el Idioma): Letter/Word Identification (Identificacion de Letras y Palabras), Word Attack (Analisis de Palabras), and Passage Comprehension (Comprension de Textos).

ANCOVA's controlling for pretests showed that at the end of grade 2 Success for All students scored substantially higher than controls on every measure ($p< .01$ or better). Figure 4 summarizes mean grade equivalents and effect sizes. Control second graders scored far below

grade level on all three scales. In contrast, Fairhill students averaged near grade level on all measures. Effect sizes on all measures were substantial. Fairhill students exceeded control by 1.8 standard deviations on Letter-Word Identification, 2.2 on Word Attack, and 1.3 on Passage Comprehension.

==========

Figure 4 Here

==========

Fremont (Bilingual), Wright (Bilingual), and El Vista (ESL)

Data from first graders in the three California Success for All schools were analyzed together by Dianda and Flaherty (1995), pooling data across schools in four categories: English-dominant students, Spanish-dominant students taught in Spanish (*Lee Conmigo* in Success for All schools), Spanish-dominant students taught in English ("sheltered students"), and speakers of languages other than English or Spanish taught in English. The pooled results are summarized in Figure 5 (from Dianda, 1995).

==========

Figure 5 Here

==========

As is clear in Figure 5, all categories of Succe for All students scored substantially better than control students. The differences were grea , however, for Spanish-dominant students taught in bilingual classes (ES = +1.03) and those taught in sheltered English programs (ES = +1.02). The bilingual students scored at grade level, and more than six months ahead of controls. The sheltered students scored about two months below grade level, but were still four months ahead of their controls. Both English-speaking students and speakers of languages other than English or Spanish scored above grade level and about two months ahead of their controls.

The effects of Success for All on the achievement of English language learners are substantially positive. Across three schools implementing *Lee Conmigo*, the Spanish curriculum used in bilingual Success for All schools, the average effect size for first graders on Spanish assessments was +0.88; for second graders (at Philadelphia's Fairhill Elementary) the average effect size was +1.77. For students in sheltered English instruction, effect sizes for all comparisons were also very positive, especially for Cambodian students in Philadelphia and Mexican-American students in California.

Comparing Success for All and Reading Recovery

Reading Recovery is one of the most extensively researched and widely used innovations in elementary education. Like Success for All, Reading Recovery provides one-to-one tutoring to first graders who are struggling in reading. Research on Reading Recovery has found substantial positive effects of the program as of the end of first grade, and longitudinal studies have found that some portion of these effects maintain at least through fourth grade (DeFord, Pinnell, Lyons & Young, 1988; Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1991).

Schools and districts attracted to Success for All are also often attracted to Reading Recovery, as the two programs share an emphasis on early intervention and a strong research base. Increasing numbers of districts have both programs in operation in different schools. One of the districts in the Success for All evaluation, Caldwell, Idaho, happened to be one of these. Ross, Smith, Casey, & Slavin (in press) used this opportunity to compare the two programs.

Reading Recovery tutoring is similar to that used in Success for All in that it is done by certified teachers and in that it emphasizes "learning to read by reading" and direct teaching of metacognitive skills. However, it is also different in many important ways. Reading Recovery tutors receive substantially more training than do Success for All tutors. Reading Recovery

tutoring sessions are longer than those used in Success for All (30 vs. 20 minutes). Success for All places a great deal of emphasis on a linkage between tutoring and classroom reading instruction; tutors usually use the same books as those used in the reading class and emphasize the same objectives. Tutors in Success for All teach a reading class, so it is easy for them to maintain a consistency of approach. Reading Recovery does not emphasize coordination between tutoring and classroom instruction to this degree largely because the nature and quality of classroom reading instruction is not the central concern of the Reading Recovery program. However, many schools using Reading Recovery do provide classroom reading teachers with professional development to help them create supportive classroom environments that reinforce the strategies used in tutoring.

In Caldwell, two schools are using Success for All and one is using Reading Recovery. All three are very similar rural schools with similar ethnic make-ups (10-25% Hispanic, with the remainder Anglo), proportions of students qualifying for free lunch (45-60%), and sizes (411-451). The Success for All schools were somewhat higher than the Reading Recovery school in poverty and percent Hispanic. In 1992-93, one of the Success for All schools was in its second year of implementation and the other was a new school that was in its first year (but had moved a principal and some experienced staff reassigned from the first school). Reading Recovery was in its second year of implementation.

==========

Figure 6 Here

==========

The study compared first graders in the three schools. Figure 6 summarizes the results. As is clear from the figure, students in the Success for All schools performed somewhat better than students in Reading Recovery school overall (ES=+.17). Differences for special education students were substantial, averaging an effect size of +.77. Special education students were not tutored in the Reading Recovery school and were primarily taught in a separate resource room. These students scored near the floor on all tests. In contrast, Success for All special education

students were fully mainstreamed and did receive tutoring, and their reading scores, though still low, showed them to be on the way toward success in reading.

Excluding the special education students, there were no differences in reading performance between tutored students in the Success for All and Reading Recovery schools (ES=.00). In light of earlier research, these outcomes suggest that both tutoring programs are highly effective for at-risk first graders.

The comparison of Success for All and Reading Recovery supports a common-sense conclusion. Success for All, which affects all students, has positive effects on all students. Reading Recovery focuses on tutoring and therefore produces its effects on tutored students. These results suggest that Success for All may be most appropriate in schools serving many at-risk students, while Reading Recovery may be the better choice when the number of students at risk of reading failure is small. The results may also justify a merger of the two programs, combining the breadth and comprehensiveness of Success for All with the outstanding professional development for tutors provided by Reading Recovery. Such mergers of Success for All and Reading Recovery are being started in about a half dozen schools located around the U.S.

For more on this study, see Ross et al. (in press).

Success for All and Special Education

Perhaps the most important goal of Success for All is to place a floor under the reading achievement of all children, to ensure that every child performs adequately in this critical skill. This goal has major implications for special education. If the program makes a substantial difference in the reading achievement of the lowest achievers, then it should reduce special education referrals and placements. Further, students who have IEP's indicating learning disabilities or related problems are typically treated the same as other students in Success for All. That is, they receive tutoring if they need it, participate in reading classes appropriate to their reading levels, and spend the rest of the day in age-appropriate, heterogeneous homerooms. Their tutor and/or reading teacher is likely to be a special education teacher, but otherwise they are not

treated differently. One-to-one tutoring in reading, plus high-quality reading instruction in the mainstream at the student's appropriate level, should be more effective than the small-group instruction provided in special education classes. For this reason we expect that students who have been identified as being in need of special education services will perform substantially better than similar students in traditional special education programs.

The philosophy behind the treatment of special education issues in Success for All is called "neverstreaming" (Slavin et al., 1991). That is, rather than waiting until students fall far behind, are assigned to special education, and then may be mainstreamed into regular classes, Success for All schools intervene early and intensively with students who are at risk to try to keep them out of the special education system. Once students are far behind special education services are unlikely to catch them up to age-appropriate levels of performance. Students who have already failed in reading are likely to have an overlay of anxiety, poor motivation, poor behavior, low self-esteem, and ineffective learning strategies that are likely to interfere with learning no matter how good special education services may be. Ensuring that all students succeed in the first place is a far better strategy if it can be accomplished. In Success for All, the provision of research-based preschool, kindergarten, and first grade reading, one-to-one tutoring, and family support services are likely to give the most at-risk students a good chance of developing enough reading skills to remain out of special education, or to perform better in special education than would have otherwise been the case.

The data relating to special education outcomes clearly support these expectations. Several studies have focused on questions related to special education. One of the most important outcomes in this area is the consistent funding of particularly large effects of Success for All for students in the lowest 25% of their classes. While effect sizes for students in general have averaged around + 0.50 on individually administered reading measures, effect sizes for the lowest achievers have averaged in the range of +1.00 to +1.50 across the grades. Across five Baltimore schools only 2.2% of third graders averaged two years behind grade level, a usual criterion for special education placement. In contrast, 8.8% of control third graders scored this poorly.

Baltimore data have also shown a reduction in special education placements for learning disabilities of about half (Slavin et al., 1992). A recent study of two Success for All schools in Ft. Wayne, Indiana found that over a two year period 3.2% of Success for All students in grades K-1 and 1-2 were referred to special education for learning disabilities or mild mental handicaps. In contrast, 14.3% of control students were referred in these categories (Smith, Ross, & Casey, 1994).

Taken together, these findings support the conclusion that Success for All both reduces the need for special education services (by raising the reading achievement of very low achievers) and reduces special education referrals and placements.

Another important question concerns the effects of the program on students who have already been assigned to special education. Here again, there is evidence from different sources. In the study comparing Reading Recovery and Success for All described above, it so happened that first graders in special education in the Reading Recovery group were not tutored, but instead received traditional special education services in resource rooms. In the Success for All schools, first graders who had been assigned to special education were tutored one-to-one (by their special education teachers) and otherwise participated in the program in the same way as all other students. As noted earlier (recall Figure 6), special education students in Success for All were reading substantially better (ES=+.77) than special education students in the comparison school (Ross et al., in press). In addition, Smith et al. (1994) combined first grade reading data from special education students in Success for All and control schools in four districts: Memphis, Ft. Wayne (IN), Montgomery (AL), and Caldwell (ID). Success for All special education students scored substantially better than controls (mean ES =+.59).

Conclusion

The results of evaluations of 19 Success for All schools in nine districts in eight states clearly show that the program increases student reading performance. In every district, Success

for All students learned significantly more than matched control students. Significant effects were not seen on every measure at every grade level, but the consistent direction and magnitude of the effects show unequivocal benefits for Success for All students. This paper also adds evidence showing particularly large impacts on the achievement of limited English proficient students in both bilingual and ESL programs, and on both reducing special education referrals and improving the achievement of students who have been assigned to special education. It compares the outcomes of Success for All with those of another early intervention program, Reading Recovery.

The Success for All evaluations have used reliable and valid measures, individually administered tests that are sensitive to all aspects of reading: comprehension, fluency, word attack, and word identification. Performance of Success for All students has been compared to that of matched students in matched control schools, who provide the best indication of what students without the program would have achieved. Replication of high-quality experiments in such a wide variety of schools and districts is extremely unusual.

An important indicator of the robustness of Success for All is the fact that of the more than 150 schools that have used the program for periods of 1-7 years, only six have dropped out (in all cases because of changes of principals). Many other Success for All schools have survived changes of superintendents, principals, facilitators, and other key staff, major cuts in funding, and other serious threats to program maintenance.

The research summarized here demonstrates that comprehensive, systemic school-by-school change can take place on a broad scale in a way that maintains the integrity and effectiveness of the model. The nineteen schools in nine districts that we are studying in depth are typical of the larger set of schools currently using Success for All in terms of quality of implementation, resources, demographic characteristics, and other factors. Program outcomes are not limited to the original home of the program; in fact, outcomes tend to be somewhat better outside of Baltimore. The widely held idea based on the Rand study of innovation (Berman & McLaughlin, 1978; McLaughlin, 1990) that comprehensive school reform must be invented by school staffs themselves is certainly not supported in research on Success for All. While the program is adapted

to meet the needs of each school, and while school staffs must agree to implement the program by a vote of 80% or more, Success for All is an externally developed program with specific materials, manuals, and structures. The observation that this program can be implemented and maintained over considerable time periods and can be effective in each of its replication sites certainly supports the idea that every school staff need not reinvent the wheel.

There is nothing magic about Success for All. None of its components are completely new or unique. Obviously, schools serving disadvantaged students can have great success without a special program if they have an outstanding staff, and other prevention/early intervention models, such as Reading Recovery (Pinnell, 1989) and the School Development Program (Comer, 1988) also have evidence of effectiveness with disadvantaged children. The main importance of the Success for All research is not in validating a particular model or in demonstrating that disadvantaged students can learn. Rather, its greatest importance is in demonstrating that success for disadvantaged students can be routinely ensured in schools that are not exceptional or extraordinary (and were not producing great success before the program was introduced). We cannot ensure that every school has a charismatic principal or every student has a charismatic teacher. Nevertheless, we can ensure that every child, regardless of family background, has an opportunity to succeed in school.

The demonstration that an effective program can be replicated and can be effective in its replication sites removes one more excuse for the continuing low achievement of disadvantaged children. In order to ensure the success of disadvantaged students we must have the political commitment to do so, with the funds and policies to back up this commitment. Success for All does require a serious commitment to restructure elementary schools and to reconfigure uses of Title 1, special education, and other funds to emphasize prevention and early intervention rather than remediation. These and other systemic changes in assessments, accountability, standards, and legislation can facilitate the implementation of Success for All and other school reform programs. However, we must also have methods known not only to be effective in their original

sites, but also to be replicable and effective in other sites. The evaluations presented in this paper provide a practical demonstration of the effectiveness and replicability of one such program.

References

Berman, P., & McLaughlin, M (1978). *Federal programs supporting educational change: A model of education change, Vol. VIII: Implementing and sustaining innovations.* Santa Monica, CA: Rand.

Comer, J. (1988). Educating poor minority children. *Scientific American, 259,* 42-48.

DeFord, D.E., Pinnell, G.S., Lyons, C.A., & Young, P. (1987). *Ohio's Reading Recovery program: Vol. VII, Report of the follow-up studies.* Columbus, OH: Ohio State University.

Dianda, M.R. & Flaherty, J.F. (April 1995). *Effects of Success for All on the reading achievement of first graders in California bilingual programs.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Dianda, M.R., Madden, N.A., & Slavin, R.E. (1993, April). *Lee Conmigo: Success for All in schools serving limited English proficient students.* Paper presented at the annual meeting of the American Educational Research Association, Atlanta.

Garcia, E.E. (1991). Bilingualism, second language acquisition, and the education of Chicano language minority students. In R.R. Valencia (Ed.), *Chicano school failure and success: Research and policy agendas for the 1990's.* New York: Falmer.

Garcia, E.E. (1994, April). *The impact of linguistic and cultural diversity on America's schools: A need for new policy.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

GAO, 1994. *Limited English proficiency: A growing and costly educational challenge facing many school districts.* Washington, DC: United States General Accounting Office.

Hertz-Lazarowitz, R. Ivory, G. & Calderón, M. (1993). *The bilingual cooperative integrated reading and composition (BCIRC) project in the Ysleta Independent School District: Standardized test outcomes.* Baltimore, MD: Johns Hopkins University, Center for Research on Effective Schooling for Disadvantaged Students.

Horwitz, R.I. (1987). Complexity and contradiction in clinical trial research. *American Journal of Medicine, 82,* 498-510.

Levin, H.M. (1987). Accelerated schools for disadvantaged students. *Educational Leadership, 44* (6), 19-21.

Madden, N.A., Slavin, R.E., Karweit, N.L., Dolan, L.J., & Wasik, B.A. (1993). Success for All: Longitudinal effects of a restructuring program for inner-city elementary schools. *American Educational Research Journal.*

Matt, G.E., & Cook, T.D. (1994). Threats to the validity of research and syntheses. In H. Cooper & L.V. Hedges (Eds.), *The handbook of research synthesis* (pp. 503-520). New York: Russell Sage.

McLaughlin, M.W. (1990). The Rand change agent study revisited: Macro perspectives and micro realities. *Educational Researcher, 19*(9), 11-16

Pinnell, G.S. (1989). Reading Recovery: Helping at-risk children learn to read. *Elementary School Journal, 90,* 161-182.

Pinnell, G.S., Lyons, C.A., DeFord, D.E., Bryk, A.S., & Seltzer, M. (1994). Comparing instructional models for the literacy education of high risk first graders. *Reading Research Quarterly, 29,* 8-38.

Pinnell, G.S., Lyons, C.A., DeFord, D.E., Bryk, A.S., & Seltzer, M. (1991). *Studying the effectiveness of early intervention approaches for first grade children having difficulty in reading.* Columbus: Ohio State University, Martha L. King Language and Literacy Center.

Ross, S.M., Smith, L.J.& Casey, J., Johnson, B., & Bond,C. (1994, April). *Using "Success for All" to restructure elementary schools: A tale of four cities.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

Ross, S.M., Smith, L.J., & Casey, J., & Slavin, R.E. (in press). Increasing the academic success of disadvantaged children: An examination of alternative early intervention programs. *American Educational Research Journal.*

Sizer, T. (1984). *Horace's compromise: The dilemma of the American high school.* Boston: Houghton Mifflin.

Slavin, R.E. (1986) Best-evidence synthesis: An alternative to meta-analyitic and traditional reviews. *Educational Researcher, 15*(9), 5-11.

Slavin, R.E. (1987). Ability grouping and student achievement in elementary schools: A best-evidence synthesis. *Review of Educational Research, 57*, 347-350.

Slavin, R.E. (1994). School and classroom organization in beginning reading: Class size, aides, and instructional grouping. In R.E. Slavin, N.L. Karweit, B.A. Wasik, & N.A. Madden (Eds.), *Preventing early school failure: Research on effective strategies.* Boston: Allyn & Bacon.

Slavin, R.E. (1995). *Cooperative Learning: Theory, research, and practice* (2nd Ed.). Boston: Allyn & Bacon.

Slavin, R.E., Karweit, N.L., & Wasik, B.A., (1992/93). Preventing early school failure: What works? *Educational Leadership, 50*(4), 10-18.

Slavin, R.E., Karweit, N.L., & Wasik, B.A. (1994). *Preventing early school failure: Research on effective strategies.* Boston: Allyn & Bacon.

Slavin, R.E., & Madden, N.A. (1993, April). *Multi-site replicated experiments: An application to Success for All.* Paper presented at the annual meeting of the American Educational Research Association, Atlanta.

Slavin, R.E., & Madden, N.A. (1994). *Implementing Success for All in the Philadelphia Public Schools* (Final report to the Pew Charitable Trusts). Baltimore, MD: Johns Hopkins University, Center for Research on Effective Schooling for Disadvantaged Students.

Slavin, R.E. & Madden, N.A., (1995, April). *Effects of Success for All on the Achievement of English Language Learners.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Slavin, R.E., Madden, N.A., Karweit, N.L., Dolan, L., & Wasik, B.A. (1992). *Success for All: A relentless approach to prevention and early intervention in elementary schools.* Arlington, VA: Educational Research Service.

Slavin, R.E., Madden, N.A., Karweit, N.L., Dolan, L., & Wasik, B.A., Ross, S.M., & Smith, L.J. (1994). "Whenever and wherever we choose...:" The replication of Success for All. *Phi Delta Kappan, 75*(8), 639-647.

Slavin, R.E., Madden, N.A., Karweit, N.L., Dolan, L., & Wasik, B.A., Ross, S.M., & Smith, L.J. (1994, April). *Success for All: Longitudinal effects of systemic school-by-school reform in seven districts.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

Slavin, R.E., Madden, N.A., Karweit, N.L., Dolan, L., & Wasik, B.A., Shaw, A., Mainzer, K.L., & Haxby, B. (1991). Neverstreaming: Prevention and early intervention as alternatives to special education. *Journal of Learning Disabilities, 24,* 373-378.

Slavin, R.E., & Yampolsky, R. (1991). *Effects of Success for All on students with limited English proficiency: A three-year evaluation.* Baltimore, MD: Johns Hopkins University, Center for Research on Effective Schooling for Disadvantaged Students.

Smith, L.J., & Ross, S.M., & Casey, J.P. (1994). *Special education analyses for Success for All in four cities.* Memphis: University of Memphis, Center for Research in Educational Policy.

Stevens, R.J., & Madden, N.A., Slavin, R.E., & Farnish, A.M. (1987). Cooperative Integrated Reading and Composition: Two field experiments. *Reading Research Quarterly, 22,* 433-454.

Wasik, B.A., & Slavin, R.E. (1993). Preventing early reading failure with one-to-one tutoring: A review of five programs. *Reading Research Quarterly, 28,* 178-200.

Willig, A.C. (1985). A meta-analysis of selected studies on the effectiveness of bilingual education. *Review of Educational Research, 55,* 269-317.

Wong-Fillmore, L., & Valadez, C. (1986). Teaching bilingual learners. In M.C. Wittrock (Ed.), *Handbook of Research on Teaching* (3rd Ed.). New York: Macmillan.

Table 1
Characteristics of Success for All Schools in the Longitudinal Study

District/School	Enrollment	% Free Lunch	Ethnicity	Date Began SFA	Data Collected	Pre-School ?	Full-day K?	Comments
Baltimore								
B1	500	83	B-96% W-4%	1987	88-94	yes	yes	First SFA school; had additional funds first 2 years
B2	500	96	B-100%	1988	89-94	some	yes	Had add'l funds first 4 years.
B3	400	96	B-100%	1988	89-94	some	yes	
B4	500	85	B-100%	1988	89-94	some	yes	
B5	650	96	B-100%	1988	89-94	some	yes	
Philadelphia								
P1	620	96	A-60% W-20% B-20%	1988	89-94	no	yes	Large ESL program for Cambodian children
P2	600	97	B-100%	1991	92-93	some	yes	
P3	570	96	B-100%	1991	92-93	no	yes	
P4	840	98	B-100%	1991	93	no	yes	
P5	700	98	L-100%	1992	93-94	no	yes	Study only involves students in Spanish bilingual program.
Charleston, SC								
CS1	500	40	B-60% W-40%	1990	91-92	no	no	
Memphis, TN								
MT1	350	90	B-95% W-5%	1990	91-94	yes	no	Program implemented only in grades K-2
MT2	530	90	B-100%	1993	94	yes	yes	
MT3	290	86	B-100%	1993	94	yes	yes	
MT4	370	90	B-100%	1993	94	yes	yes	
Ft. Wayne, IN								
F1	330	65	B-56% W-44%	1991	92-94	no	yes	SFA schools (& controls) are part of desegregation plan
F2	250	55	B-55% W-45%	1991	92-94	no	yes	SFA schools (& controls) are part of desegregation plan.
Mongomery, AL								
MA1	450	95	B-100%	1991	93-94	no	yes	
MA2	460	97	B-100%	1991	93-94	no	yes	
Caldwell, ID								
CI1	400	20	W-80% L-20%	1991	93-94	no	no	Study compares two SFA schools to Reading Recovery school.
Modesto, CA								
MC1	640	70	W-54% L-25% A-17% B-4%	1992	94	yes	no	Large ESL program for students speaking 17 languages
MC2	560	98	L-66% W-24% A-10%	1992	94	yes	no	Large Spanish bilingual program
Riverside, CA								
R1	930	73	L-54% W-33% B-10% A-3%	1992	94	yes	no	Large Spanish bilingual and ESL programs. Year round school

Key
B African American
A Asian American
L Latino
W White

Table 2

Cohort Means for Success for All and Control Schools

Grade 1 (N=55)

	All Students		Lowest 25%	
	SFA	*Control*	*SFA*	*Control*
Durrell Oral Reading				
Mean	6.28	4.75	3.27	2.07
(SD)	(1.83)	(1.49)	(2.61)	(2.05)
GE	1.98	1.73	1.48	1.27
t		6.73***		5.41***
ES		+0.43		+0.65
Woodcock Passage Comprehension				
Mean	15.15	12.48	8.76	6.18
(SD)	(2.65)	(3 26)	(3.96)	(3.84)
GE	1.61	1.47	1.29	1.16
t		6.24***		6.32***
ES		+0.42		+0.86
Woodcock Word Attack				
Mean	13.60	8.08	8.58	3.59
(SD)	(3.60)	(3.43)	(5.33)	(3.32)
GE	1.82	1.50	1.53	1.16
t		16.32***		9.78***
ES		+0.79		+1.70
Woodcock Word Identification				
Mean	29.05	23.23	18.31	13.22
(SD)	(6.78)	(6.22)	(8.18)	(6.40)
GE	1.79	1.60	1.45	1.28
t		9.58***		7.27***
ES		+0.49		+0.80
Mean GE	1.80	1.57	1.44	1.22
Mean ES		+0.53		+1.03

* p<.05
** p<.01
*** p<.001

Table 3

Cohort Means for Success for All and Control Schools

Grade 2 (N=36)

	All Students		Lowest 25%	
	SFA	*Control*	*SFA*	*Control*
Durrell Oral Reading				
Mean	12.39	10.10	7.08	4.47
(SD)	(2.27)	(2.22)	(3.36)	(2.60)
GE	3.00	2.61	2.11	1.68
t		4.97***		7.04***
ES		+0.38		+1.01
Woodcock Passage Comprehension				
Mean	25.30	21.52	17.12	12.54
(SD)	(2.48)	(3.71)	(7.22)	(4.90)
GE	2.43	2.05	1.71	1.48
t		4.61***		3.70**
ES		+0.41		+0.96
Woodcock Word Attack				
Mean	20.15	14.28	12.46	5.91
(SD)	(3.87)	(3.94)	(6.94)	(4.41)
GE	2.42	1.86	1.74	1.34
t		8.52***		8.68***
ES		+0.71		+1.75
Woodcock Word Identification				
Mean	46.29	39.08	33.84	23.92
(SD)	(5.79)	(6.80)	(11.11)	(9.07)
GE	2.52	2.15	1.93	1.63
t		7.27***		6.13***
ES		+0.48		+0.87
Mean GE	2.59	2.17	1.87	1.53
Mean ES		+0.50		+1.15

* p<.05
** p<.01
*** p<.001

Table 4

Cohort Means for Success for All and Control Schools

Grade 3 (N=33)

	All Students		Lowest 25%	
	SFA	*Control*	*SFA*	*Control*
Durrell Oral Reading				
Mean	17.65	14.85	10.56	7.23
(SD)	(2.50)	(2.56)	(2.97)	(3.31)
GE	3.87	3.41	2.69	(2.14)
t		5.42***		6.76***
ES		+0.36		+0.96
Woodcock Passage Comprehension				
Mean	30.98	25.78	21.56	14.20
(SD)	(3.69)	(2.87)	(4.68)	(5.47)
GE	3.03	2.48	2.06	1.56
t		5.63***		6.10***
ES		+0.51		+1.78
Woodcock Word Attack				
Mean	24.06	19.21	14.35	9.40
(SD)	(4.03)	(4.37)	(7.06)	(6.62)
GE	2.91	2.32	1.87	1.57
t		6.07***		6.43***
ES		+0.45		+1.18
Woodcock Word Identification				
Mean	55.38	48.13	41.90	32.05
(SD)	(5.87)	(5.03)	(7.37)	(7.39)
GE	3.24	2.64	2.30	1.88
t		6.87***		7.24***
ES		+0.39		+0.85
Mean GE	3.26	2.71	2.23	1.79
Mean ES		+0.43		+1.19

* p<.05
** p<.01
*** p<.001

Table 5

Cohort Means for Success for All and Control Schools

Grade 4 (N=13)

	All Students		Lowest 25%	
	SFA	*Control*	*SFA*	*Control*
Gray Comprehension				
Mean	22.38	18.01	14.17	5.42
(SD)	(3.33)	(2.74)	(4.04)	(2.63)
GE	3.78	3.10	2.43	1.44
t		3.67**		4.19**
ES		+0.44		+2.21
Gray Passage				
Mean	32.78	24.37	13.20	2.97
(SD)	(7.40)	(4.90)	(5.11)	(2.87)
GE	4.48	3.64	2.44	1.20
t		3.79**		4.68**
ES		+0.51		+1.64
Woodcock Passage Comprehension				
Mean	34.31	28.80	24.60	13.18
(SD)	(2.84)	(1.93)	(2.97)	(4.03)
GE	3.46	2.78	2.36	1.54
t		6.11***		15.27***
ES		+0.62		+1.61
Woodcock Word Attack				
Mean	26.27	19.51	11.60	4.87
(SD)	(4.97)	(2.28)	(3.93)	(3.21)
GE	3.35	2.35	1.68	1.27
t		4.46***		2.41**
ES		+0.47		+2.26
Woodcock Word Identification				
Mean	63.65	55.11	47.89	31.53
(SD)	(4.64)	(4.01)	(5.16)	(6.17)
GE	4.13	3.21	2.62	1.87
t		5.77***		4.67**
ES		+0.61		+2.87
Mean GE	3.84	3.02	2.31	1.46
Mean ES		+0.53		+1.68

* p<.05
** p<.01
*** p<.001

Table 6

Cohort Means for Success for All and Control Schools

Grade 5 (N=6)

	All Students		Lowest 25%	
	SFA	*Control*	*SFA*	*Control*
Gray Comprehension				
Mean	27.36	21.65	17.79	8.98
(SD)	(3.21)	(3.66)	(4.62)	(2.31)
GE	5.27	3.63	3.06	1.80
t		3.55**		3.66*
ES		+0.59		+1.35
Gray Passage				
Mean	43.32	31.37	17.20	8.36
(SD)	(7.72)	(6.17)	(4.80)	(3.52)
GE	5.43	4.37	2.92	1.74
t		6.61***		6.20**
ES		+0.67		+1.36
Woodcock Passage Comprehension				
Mean	37.48	32.60	28.76	22.81
(SD)	(2.43)	(1.42)	(2.45)	(2.99)
GE	4.10	3.23	2.78	2.18
t		7.51***		3.50*
ES		+0.69		+0.79
Woodcock Word Attack				
Mean	29.60	21.73	17.49	8.23
(SD)	(3.25)	(1.07)	(3.00)	(1.37)
GE	4.50	2.61	2.15	1.51
t		6.22**		8.27***
ES		+0.74		+1.83
Woodcock Word Identification				
Mean	69.94	60.35	54.20	40.78
(SD)	(4.63)	(2.76)	(5.25)	(3.72)
GE	4.79	3.74	3.12	2.24
t		5.36**		5.23**
ES		+0.71		+1.15
Mean GE	4.82	3.52	2.81	1.89
Mean ES		+0.68		+1.29

* p<.05
** p<.01
*** p<.001

Figure 1

Comparison of Success for All and Control Schools
in Mean Reading Grade Equivalents and Effect Sizes
1988-1994

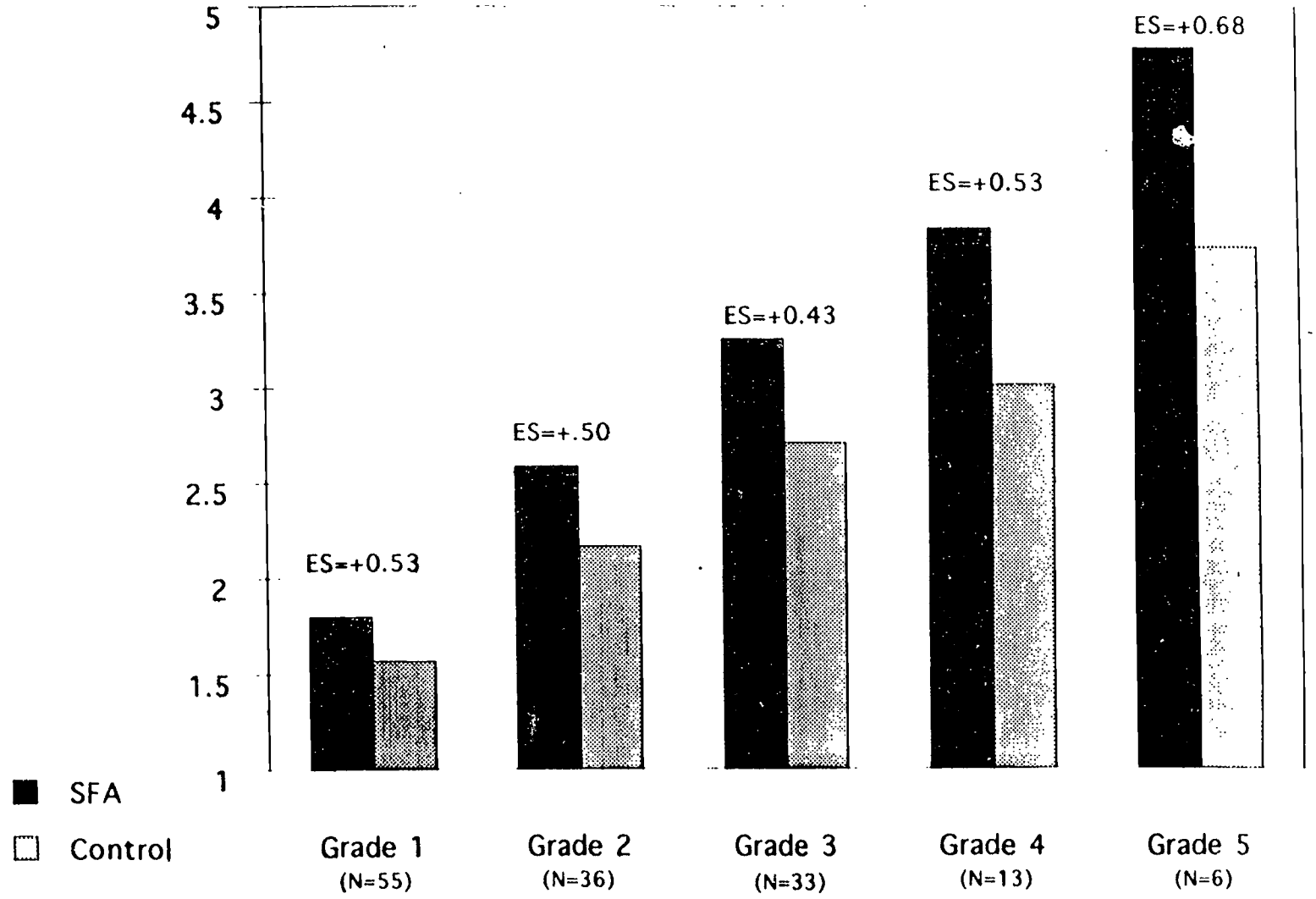


Figure 2

Effect Sizes Comparing Success for All and Control Schools According to Implementation Year

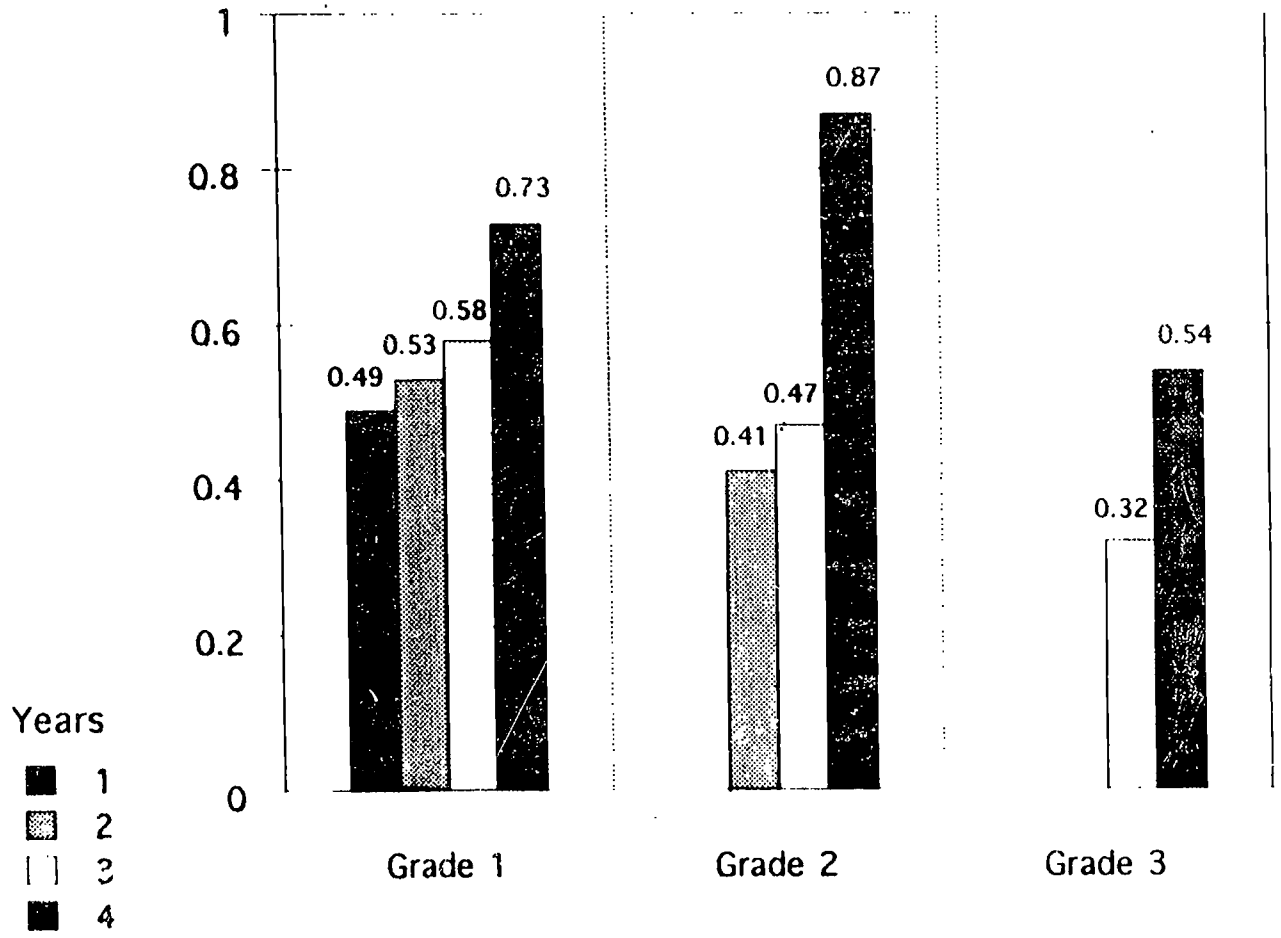


Figure3

Achievement Medians (Grade Equivalents and Effect Sizes) for Success for All and Control Schools

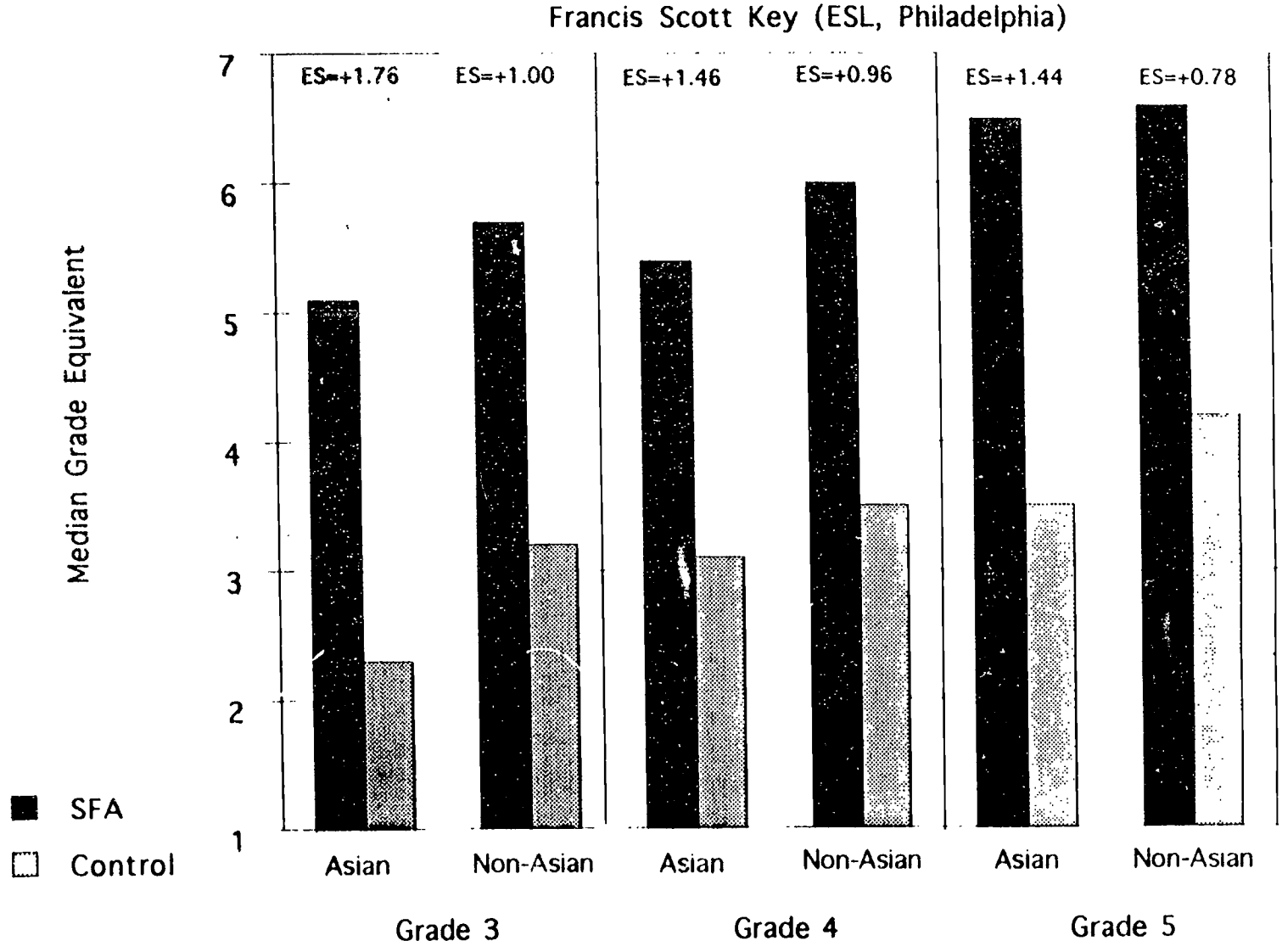


Figure 4

Spanish Reading Achievement Medians (Grade Equivalents and Effect Sizes)
For Success for All and Control Schools, Spanish-Dominant Students

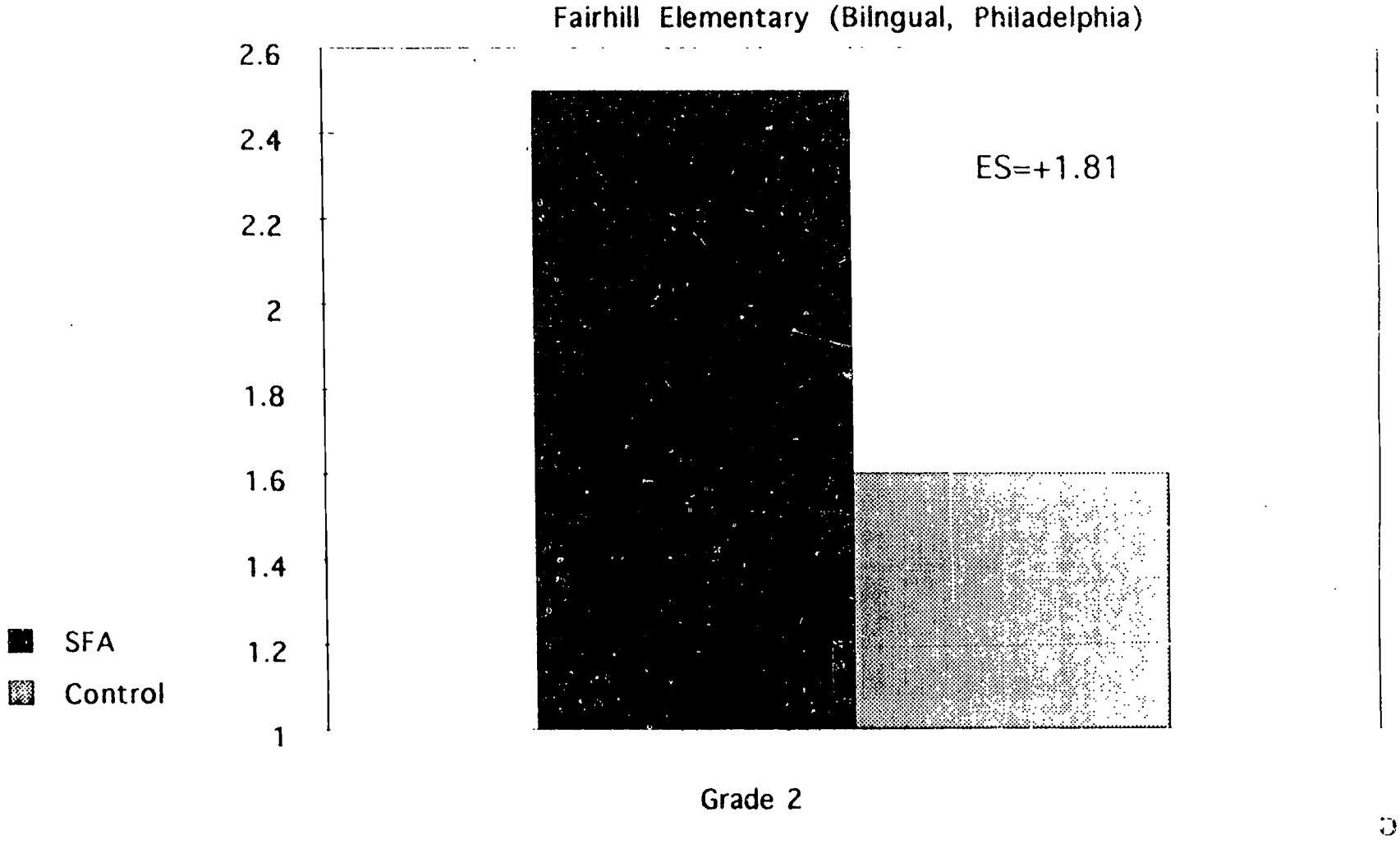
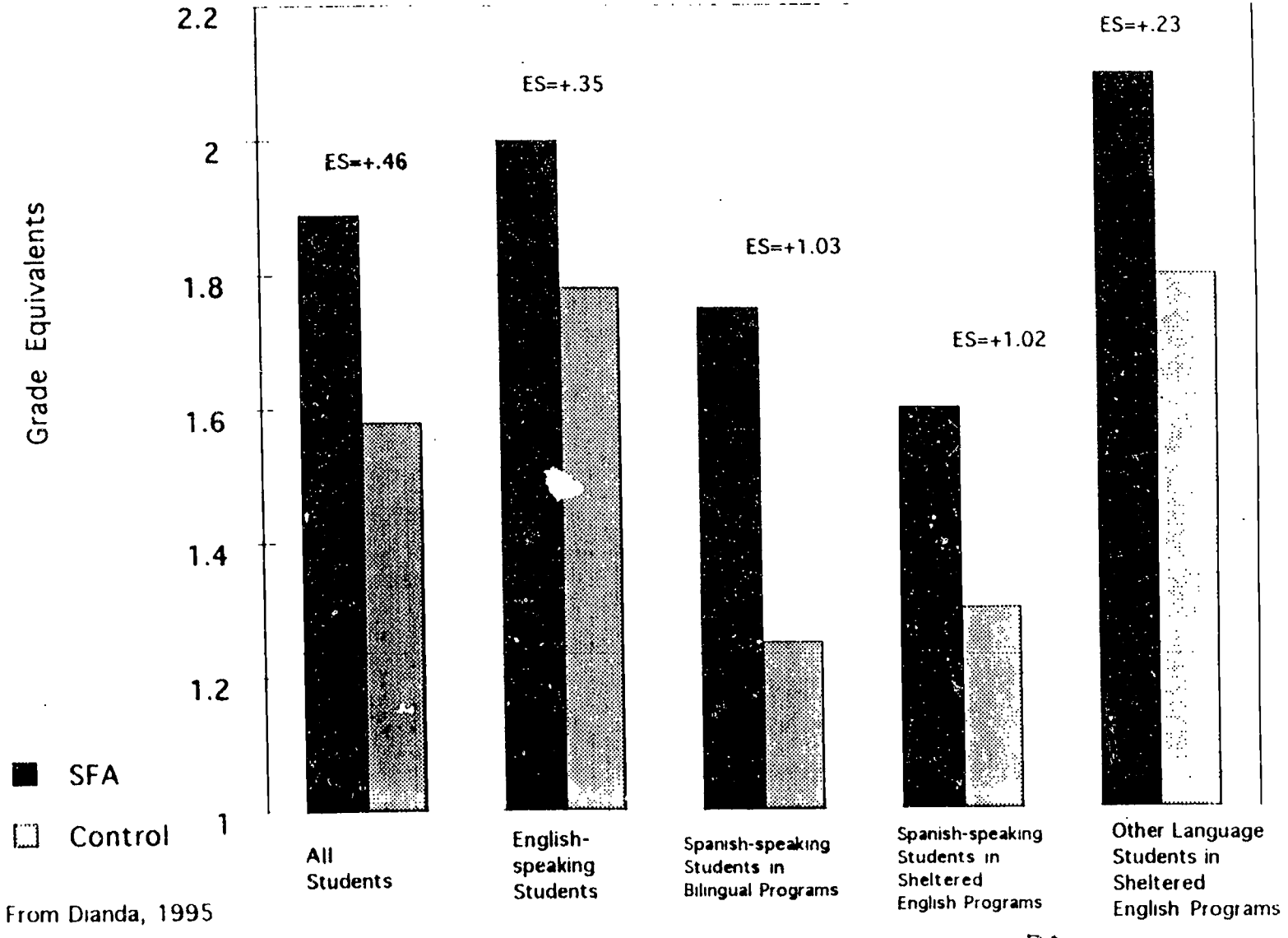


Figure 5

Achievement of Success for All and Control Students by Language Group

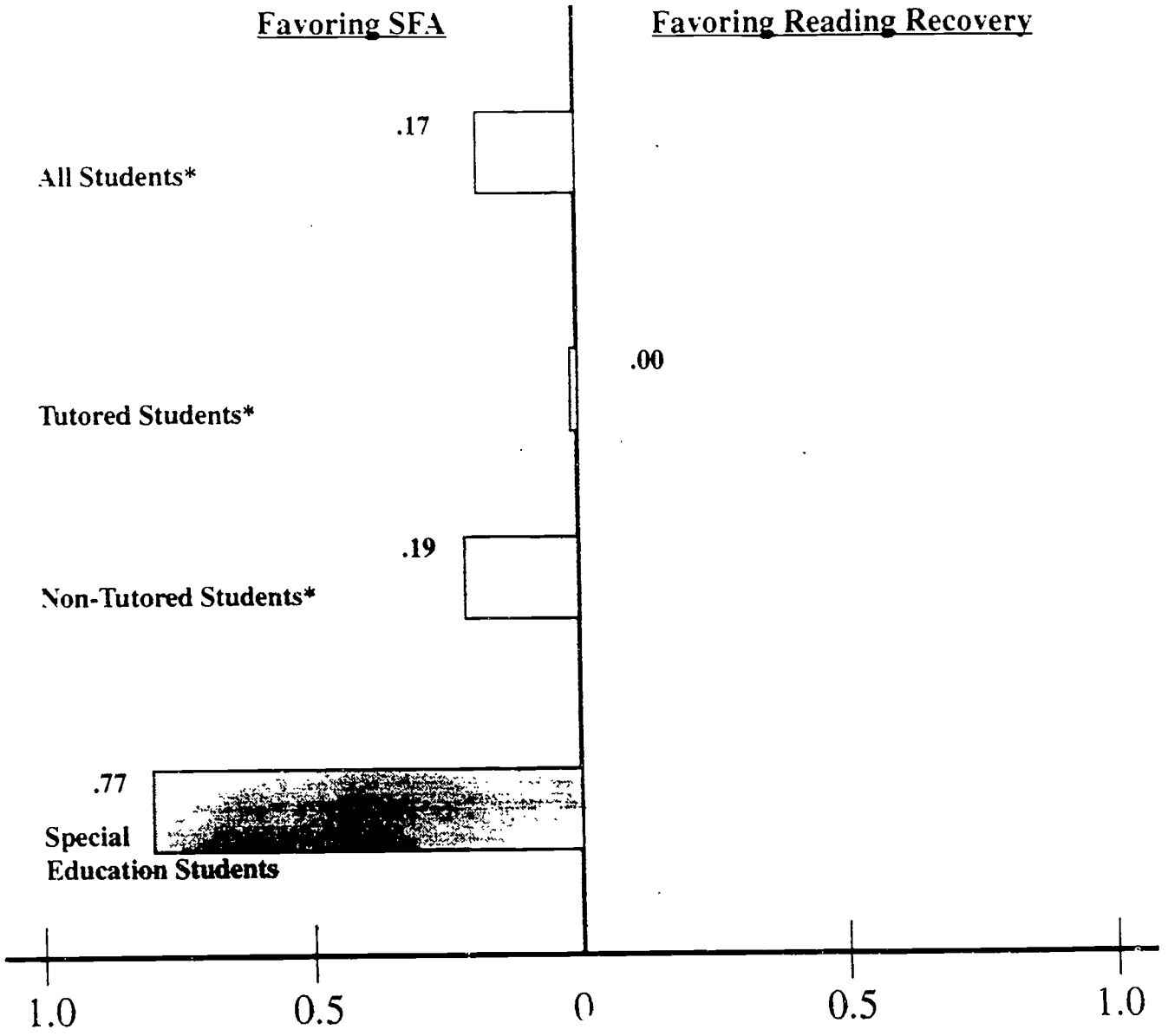
Riverside and Modesto



From Dianda, 1995

FIGURE 6

Comparison of Success for All and Reading Recovery Students in Mean Effect Sizes



Note: Adapted from Ross et al., in press.

*Excludes special education students